MARKED-UP VERSION OF THE RELATED APPLICATIONS SECTION

Related Applications

This application claims the benefit of and priority to U.S. provisional patent application Serial No. 60/176,332, filed January 14, 2000, the disclosure of which is incorporated herein by reference in its entirety.

MARKED-UP VERSIONS OF THE AMENDED PARAGRAPHS

Paragraph on page 6, line 24 to page 7, line 2

FIG. 1 shows a partial perspective view of a tool holder 10 according to one embodiment of the present invention. The tool holder 10 is shown with two rails. The depicted rails are generally flat, generally parallel crossbars 12a, 12b which are vertically and horizontally offset from each other; however, the rails could be rods or other shaped structures similarly offset and spaced. Two generally opposed depressions 14a, 14b are formed along inside edges of the crossbars 12. The depressions 14a, 14b are horizontally aligned, although vertically offset, and define an opening 16 therebetween for receiving therein a lower end of an elongate member. A stable structure is formed by attaching end plates 18 to respective ends of the crossbars 12a, 12b.

Paragraph on page 7, lines 3-18

FIG. 2 shows a perspective view of the entire tool holder 10 shown in FIG. 1 supporting a plurality of elongate members 20. The elongate members 20 are inserted in the spaces 16 defined by a series of opposing depressions 14a, 14b. The depressions 14a, 14b can be of any shape and are useful in preventing the elongate members 20 from moving laterally or slipping. Examples of suitable shapes for the depressions 14a, 14b can include, but are not limited to, squares, rectangles, triangles, semi-circles, semi-ellipses, a sinusoidal waveform, etc. Other arcuate and linear edged shapes and combinations thereof will be apparent to those skilled in the art. FIGS. 1-3A depict depressions 14a, 14b resembling open triangles or wedges. One advantage of using triangularly-shaped depressions 14a, 14b is that they work well for elongate members 20 with symmetrical cross-sections, such as generally cylindrical tool handles. Such elongate members 20 are typical of handles found on many articles, such as shovels, rakes, hoes, and other common garden tools. These circular cross-sections are of relatively small diameter, so as to fit comfortably within the palm of a user's hand. Another advantage of triangular-shaped depressions 14a, 14b is that the shape provides a relatively wide opening, facilitating insertion and self-centering of the elongate members 20, while securely retaining the members 20 in the center of the notches provided by the apexes of the triangles.

Paragraph on page 7, line 19 to page 8, line 5

The depressions 14a, 14b, however, can be manufactured to be of any shape or size to accommodate different sized and shaped member cross-sections, or to satisfy an aesthetic purpose. The shape of the depressions 14a on the upper crossbar 12a may be the same as or different from the shape of the depressions 14b on the lower crossbar 12b. One example of an instance where different depression shapes may be useful is in forming a depression 14c in a crossbar 12c having at least one curved or arcuate shape, such as a general C or S shape to further prevent the elongate member 20 from accidentally becoming dislodged from its resting position, as shown in FIG. 3B. An elongate member 20 can be nested more securely against lateral slippage in the curved depression 14c. Due to the more positive retention of the elongate member 20 within the crossbar 12c, it is more difficult for the elongate member 20 to accidentally become dislodged from its resting position and pivot about the lower crossbar. It is, however, generally desirable that the shape of the depressions 14a, 14b, and 14c in the crossbars 12a, 12b, and 12c, respectively, be of a simple shape for ease in inserting and removing the elongate members 20. In alternative embodiments, solely one crossbar, such as an upper crossbar, may include depressions, with the lower crossbar having an uninterrupted edge.

Paragraph on page 8, lines 6-18

Referring again to FIG. 2, the elongate members 20 are held in a generally vertical orientation by the crossbars 12a, 12b. The elongate members 20 rest against the upper crossbar 12a and are prevented from pivoting excessively and falling to the ground by the lower crossbar 12b. The horizontal and vertical distances between the crossbars 12a, 12b, the depth of any depressions 14a, 14b, and the cross-sectional size and shape of the elongate member 20 determines the slope or lean of the elongate member 20 from vertical. Typically, the smaller the horizontal distance between the crossbars 12a, 12b, the less lean and more vertical the elongate member 20 will rest. Conversely, the greater the horizontal distance between the crossbars 12a, 12b the more the elongate member 20 will lean. The vertical distance between the crossbars 12a, 12b also affects lean, as well as the reaction forces exerted on the elongate member. The smaller the vertical distance between the crossbars 12a, 12b for a fixed horizontal spacing, the greater the induced moment and resultant applied force. Conversely, the greater the vertical distance

between the crossbars 12a, 12b for a fixed horizontal spacing, the smaller the induced moment and resultant applied force.

Paragraph on page 8, line 19 to page 9, line 2

The vertical location of the lower crossbar 12b in relation to the ground determines how high a user will have to lift the elongate member 20 to insert the member 20 into, or remove the member 20 from, the tool holder, because the lower tip of the elongate member 20 must clear the lower crossbar 12b before it can rest in the depressions 14a, 14b. The lower the lower crossbar 12b is positioned on the end plates 18 (i.e., the closer the lower crossbar 12b is to the ground), the less effort a user will have to exert to insert the elongate member 20 in, or remove the elongate member 20 from, the tool holder 10. In the limit, the lower crossbar 12b can rest on the ground. Additionally, the lower the upper crossbar 12a is positioned on the end plates 18 (i.e., the closer the upper crossbar 12a is to the ground), the less effort a user will have to exert to insert the elongate member 20 in, or remove the elongate member from, the tool holder 10 from the opposite side.

Paragraph on page 9, lines 3-9

The angle of the crossbars 12a, 12b relative to the ground can also be varied. One or both crossbars 12a, 12b can be angled upwards or downwards toward the center of the holder 10. When the upper crossbar 12a is angled upwards (i.e., the inside edge 22a of the upper crossbar 12a of the tool holder 10 is higher than the outside edge 24a) or when the lower crossbar 12b is angled downwards (i.e., the inside edge 22b of the lower crossbar 12b is lower than the outside edge 24b), the force exerted by the elongate member 20 can be distributed across the entire respective thicknesses of the crossbars 12a, 12b and not merely on top and bottom edges of the crossbars 12a, 12b.

Paragraph on page 9, lines 10-17

The shape of the endplates 18 shown in FIG. 2 is an irregularly shaped pentagon. The endplates 18, however, can be of any size and shape, with consideration given to their ability to support the crossbars 12a, 12b and form a stable structure with a sufficiently large footprint to prevent tipping of the tool holder when partially and fully loaded with elongate members 20. The endplates 18 may also include legs or extensions to provide additional stability, if desired;

however, if properly designed, such features are not required. Additionally, one or more intermediate endplates can also be disposed along the length of the tool holder 10 to add strength and stability to the structure by bracing the crossbars 12a, 12b at a midpoint or elsewhere.

Paragraph on page 10, line 17 to page 11, line 2

Another method of stabilizing the tool holder 10 is by increasing the mass of the holder 10 so that it will remain stable regardless of the number, size, or shape of the tools placed therein. Increasing the mass of the tool holder 10 can be accomplished by using heavy materials in the construction of the holder 10. Mass can also be increased by adding additional "weight-bearing elements," such as sand, water, rocks, cement blocks, metal plates, etc. Other weight bearing elements will be apparent to those skilled in the art. A reservoir or trough can be formed in or added to the tool holder 10 to contain the weight-bearing elements. Alternatively, the reservoir can be a hollow portion of the tool holder 10, such as hollow crossbars 12a, 12b that can be filled with water or sand by pouring the material through an opening therein. Removal can be accomplished easily through the same opening or a different opening located on a bottom side of the reservoir. Finally, optional attachment devices can be added to the tool holder 10 to removably anchor the holder to a support located on a wall or a floor. Other methods and structure for stabilizing the tool holder 10 will be apparent to those skilled in the art.

Paragraph on page 11, lines 3-11

It is also desirable that the tools remain in their resting position until intentionally moved by a user. One manner of ensuring against accidental dislodgment of the tools is to increase the horizontal distance between the crossbars 12a, 12b. The more horizontal the tool rests, the greater the force needed to dislodge the tool from its resting position such that it topples in a direction away from the rest position. The more horizontal the tools lie, however, the greater the space and generally the footprint needed to store the tools in a stable manner. If a more compact tool holder 10 is desired, then it is generally more beneficial for the tool to rest in a generally vertical position. The more vertical the tool stands, however, the less force will be required to dislodge the tool from its resting position in the depressions 14a, 14b.

Paragraph on page 14, lines 3-13

As discussed hereinabove, the rails can be flat generally parallel crossbars or they can be arcuate sections in the form of sectors or entire hoops. FIGS. 8A-8B are a schematic plan view and a cross-sectional view taken along section 8A-8A of a hoop-style tool holder 410. The tool holder 410 includes first and second rails in the form of inner and outer hoops 144a, 144b. The hoops 144a, 144b are generally concentric and offset vertically, forming a gap 116 therebetween for receiving the lower end of an elongate member 20. As with the crossbars, the hoops 144a, 144b have generally opposed edges for contacting and supporting the elongate member 20 when inserted into the tool holder 410. The hoops 144a, 144b may also have one or more depressions 214 formed therein to further restrain the elongate member 20. As shown in FIG. 8A, the inner and outer hoops 144a, 144b include respective generally radially aligned depressions 214a, 214b for cradling and restricting circumferential or lateral movement of the member 20.

Paragraph on page 15, lines 1-10

FIGS. 9A-9B are a schematic plan view and a cross-sectional view taken along section 9A-9A of another hoop-style tool holder 510 of a different overall configuration. The tool holder 510 includes first and second rails in the form of inner and outer hoops 244a, 244b. The hoops 244a, 244b are generally concentric and offset vertically, forming a gap 216 therebetween for receiving the lower end of an elongate member 20. As with the crossbars, the hoops 244a, 244b have generally opposed edges for contacting and supporting the elongate member 20 when inserted into the tool holder 510. The hoops 244a, 244b may also have one or more depressions 314 formed therein to further restrain the elongate member 20. As shown in FIG. 9A, the inner and outer hoops 244a, 244b include respective generally radially aligned depressions 314a, 314b for cradling and restricting circumferential or lateral movement of the member 20.

MARKED-UP VERSION OF AMENDED CLAIMS

1. (Amended) A tool holding device comprising:

a first rail and a second rail vertically and horizontally offset from each other thereby forming an opening therebetween for receiving an elongate member in a generally vertical orientation; and

generally horizontally disposed means for supporting a lower end of the elongate member when received between the rails.

16. (Amended) A method for storing elongate members comprising the steps of:

providing a first rail and a second rail vertically and horizontally offset from each other thereby forming an opening therebetween for receiving an elongate member in a generally vertical orientation;

providing generally horizontally disposed means for supporting a lower end of the elongate member when received between the rails; and

inserting [an] the elongate member between the rails.